samspex
d12
page 1
05.5.14

Theodor Holm Nelson
Founder of Interactive Media *Founder of Network Publishing*
Project Xanadu®
3020 Bridgeway #295, Sausalito CA 94965
Tel. 415/ 331-4422 Fax 415/ 332-0136
e-mail ted@xanadu.net
and
Sapporo HyperLab Doshin Maruyama, 8F • 2-20, Odori Nishi 20-chome
Chuo-Ku, Sapporo-shi, Hokkaido 064 JAPAN
Tel. (from the States) 011 81 11 621-1133
Fax (from the States) 011 81 11 621-1170
e-mail ted@xanadu.net

XOWI™

Xanadu® Object Web Initiative

Preliminary Specifications

(General remarks to use elsewhere, later, with these materials)

BACK-CONNECTIONS TO WEB-TYPE MATERIALS ARE NOT A TECHNICAL PROBLEM; THEY HAVE TO DO WITH COMMITMENT OF PUBLICATION.

Xanadu data has always just been a model of Clean Data--
Versions/Alts • Links • TCL • Clean Construction

"XANADU PUBLISHING" HAS ALWAYS MEANT:
Versions/Alts • Links • TCL • Clean Construction
• Committed Repository Publication

BUT IT CAN START WITH WHAT NOBODY ELSE HAS:
• Committed Repository Publication

XOWI™

Xanadu® Object Web Initiative

Preliminary Specifications

mspex
d12
ge 2
.5.14

What folow are the basic features that we have to have to call a thing "Xanadu," listed approximately by priority.

Official Xanadu Service can begin under the name "Xanadu" when Level 1, a Committed Repository, is up.

0. PRESENTATION

The business model for "Xanadu" needs to be like McDonald's: a unified system of service, image management and promotion, policy and contracts.

Because of the bad image problems we have had in the past, Xanadu's image management aspect is extremely important.

The forthcoming piece in WIRED is a monster. And things are not looking good on the net: xanadu.com is frequently down, "Xanadu America" is a mysterious page with a bunch of unrelated things on it.

Things need to be spruced up on the basis of a scalable policy.

STYLE

The objective is a clean, trendy, charming, elegant, coordinated system of presentation to the world.

Trademarks, public relations and other forms of presentation will be under management of Xanadu Central.

SEGREGATION

It is important to have Xanadu service a distinguishable entity. When someone is facing a Xanadu screen, page, place or space, they're in Xanadu, not a branch of someone else's place.

It is fine for Xanadu to manage an addressable component of others' services, but it does so as an independent structure or module (like MS-DOS).

PRELIMINARY IMAGE GROUND RULES

These have to be the ground rules for pages and spaces called "Xanadu":

1. Any page about "Xanadu" business may not have other non-Xanadu materials mixed in.
2. POSSIBLE EXCEPTIONS (may be rethought): a Xanadu page/space might have--

   return to home page of your other business

   ads for other things (since Netscape, Hotwired do this)

What follows are the basic features that we have to have to call a thing "Xanadu," listed approximately by priority.

Official Xanadu Service can begin under the name "Xanadu" when Level 1, a Committed Repository, is up.

0. PRESENTATION

The business model for "Xanadu" needs to be like McDonald's: a unified system of service, image management and promotion, policy and contracts.

Because of the bad image problems we have had in the past, Xanadu's image management aspect is extremely important.

The forthcoming piece in WIRED is a monster. And things are not looking good on the net. xanadu.com is frequently down, "Xanadu America" is a mysterious page with a bunch of unrelated things on it.

Things need to be spruced up on the basis of a scalable policy.

STYLE

The objective is a clean, trendy, charming, elegant, coordinated system of presentation to the world.

Trademarks, public relations and other forms of presentation will be under management of Xanadu Central.

SEGREGATION

It is important to have Xanadu service a distinguishable entity. When someone is facing a Xanadu screen, page, place or space, they're in Xanadu, not a branch of someone else's place.

It is fine for Xanadu to manage an addressable component of others' services, but it does so as an independent structure or module (like MS-DOS).

PRELIMINARY IMAGE GROUND RULES

These have to be the ground rules for pages and spaces called "Xanadu":

1. Any page about "Xanadu" business may not have other non-Xanadu materials mixed in.
2. POSSIBLE EXCEPTIONS (may be rethought): a Xanadu page/space might have--

return to home page of your other business
ads for other things (since Netscape. Hotwired do this)

samspex
d12
age 3
5.5.14

Standard Customer Contracts

Customer contracts for Xanadu services will be between Service Provider and Customer, provided by Xanadu Central.

Open Client Protocol

As specs are developed, we will release them.

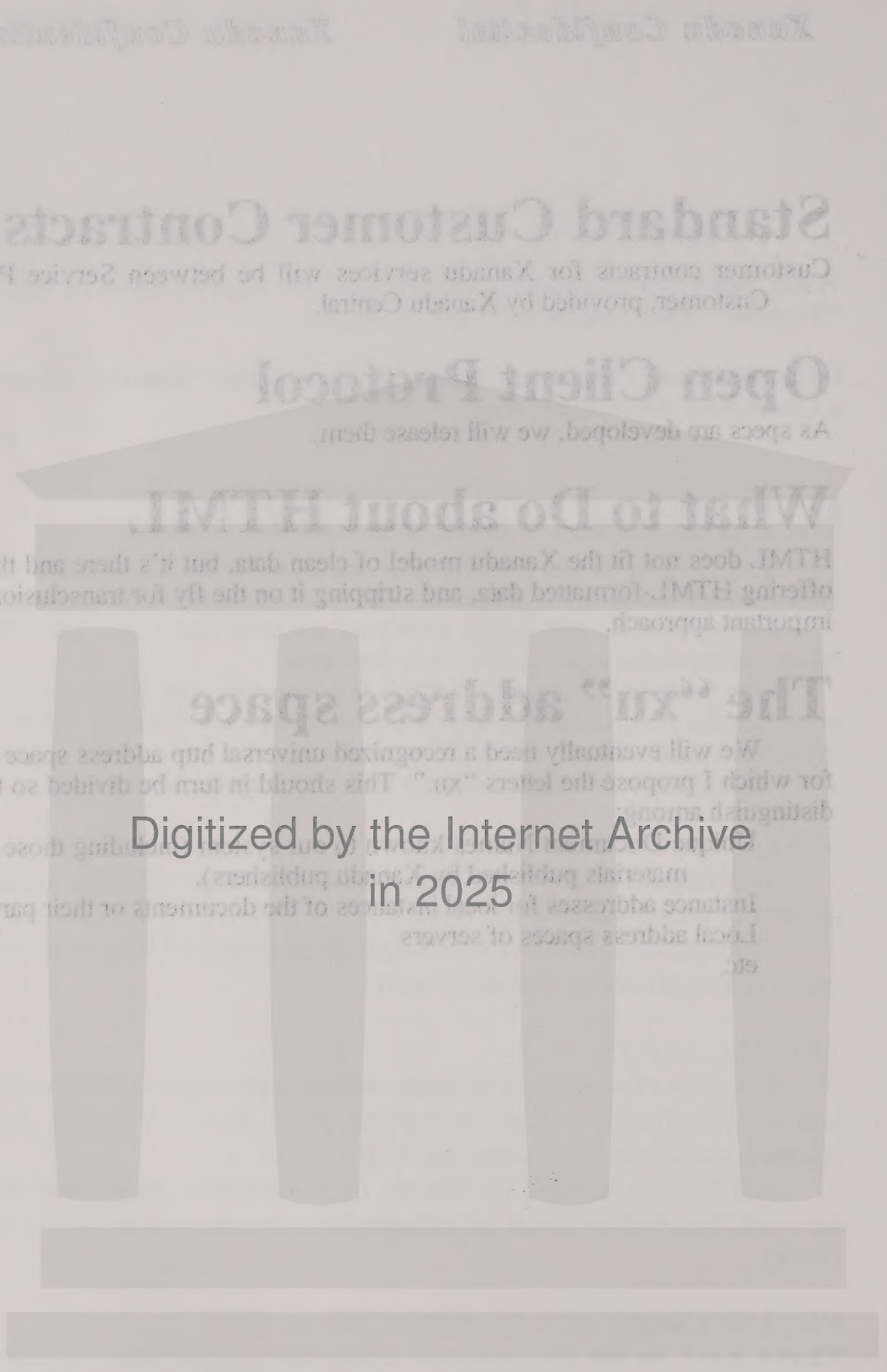
What to Do about HTML

HTML does not fit the Xanadu model of clean data, but it's there and that's that; so offering HTML-formatted data, and stripping it on the fly for transclusion, will be an important approach.

The "xu" address space

We will eventually need a recognized universal http address space of our own, for which I propose the letters "xu." This should in turn be divided so that we may distinguish among:

Unique Document Names known to our system (including those cited within materials published by Xanadu publishers).
Instance addresses for local instances of the documents or their parts
Local address spaces of servers
etc.



Digitized by the Internet Archive
in 2025

https://archive.org/details/xowipreliminarys00tedn

samspex
d12
age 4
5.5.14

XANADU SERVICES:
A Hierarchy

Here are the potential main levels of Xanadu Service, I to IV; followed by the public postings/tables required by each level.

THE FIRST ORDER OF BUSINESS:

Level I. The COMMITTED PUBLICATION REPOSITORY

A PLACE WHERE COMMITTED PUBLICATION OCCURS:

Xanadu® Committed Publication Site,
or
Xanadu® Committed Publication Archive Site.

Logical Requirements of Committed Publishing

These aspects have always been implicit.

1. **PUBLISHING CUSTOMER'S CONTRACT**

Agrees as to:

responsibility
Xanadu provider to act as sales agent & distributor only
hold Xanadu provider harmless
storage payment
non-withdrawal
etc.

2. RESPONSIBILITY DECLARATION
   (part of the standard customer contract)
3. CLEAR DETERMINATION OF PUBLISHER'S IDENTITY
4. LEGAL ADDRESS OF PUBLISHER
5. **The ACT OF PUBLICATION**
6. **Security Procedure for Act of Publication**
   PUBLICATION PROCEDURE/PASSWORD
   determined by the publisher
7. PRE-PAYMENT FOR STORAGE
8. PURCHASING CUSTOMER'S CONTRACT
   can be IMPLICIT, stated in fine print
9. User sign-on
10. User payment
11. SOFT RECEIPT

XANADU SERVICES:
A Hierarchy

Here are the potential main levels of Xanadu Service, I to IV; followed by the public postings/tables required by each level.

THE FIRST ORDER OF BUSINESS:

Level I. The COMMITTED PUBLICATION REPOSITORY

A PLACE WHERE COMMITTED PUBLICATION OCCURS:

Xanadu® Committed Publication Site.

or

Xanadu® Committed Publication Archive Site.

Logical Requirements of Committed Publishing

These aspects have always been implicit:

1. PUBLISHING CUSTOMER'S CONTRACT
   Agrees as to:
   responsibility
   Xanadu provider to act as sales agent & distributor only
   hold Xanadu provider harmless
   storage payment
   non-withdrawal
   etc.
2. RESPONSIBILITY DECLARATION
   (part of the standard customer contract)
3. CLEAR DETERMINATION OF PUBLISHER'S IDENTITY
4. LEGAL ADDRESS OF PUBLISHER
5. The ACT OF PUBLICATION
6. Security Procedure for Act of Publication
   PUBLICATION PROCEDURE/PASSWORD
   determined by the publisher
7. PRE-PAYMENT FOR STORAGE
8. PURCHASING CUSTOMER'S CONTRACT
   can be IMPLICIT, stated in fine print
9. User sign-on
10. User payment
11. SOFT RECEIPT

samspex
d12
age 5
5.5.14

Level II. QUOTABLE REPOSITORY

THE QUOTABLE REPOSITORY IS SEVERAL STEPS OF COMPLEXITY ABOVE THE COMMITTED REPOSITORY.

Logical Requirements of a Quotable Repository (in addition to Repository Publishing)

In order to have usefully purchasable microquotes--

1. **Transcopyright Permission**
   The repositor must grant transcopyright for all published materials.
2. **Client software for Purchase**
   very small purchases
   multiple identity of purchased items
3. **Nanobuck accounts.**
   Very small-denomination accounts
4. **Client Software for Edit**
   retains identities of transcluded fragments
      name/address as originally published
      name/address as transcluded into objects of interest to user
5. **Client Software for Transmission/Publication**
   separates content bytes and piece names
   transmits only the owned portions as bytes, the rest as pointers to portions owned by others
6. **Handshake Protocol**
   for quick in-and-out.
7. **SALE PROTOCOL**
   for small parts
8. **Send Protocol**
   How members are sent

Xanadu Confidential Xanadu Confidential

Level III. EDITABLE QUOTABLE REPOSITORY

This is the next step: WHAT IT TAKES TO KEEP THE CONNECTION POINTERS (links and transclusions) IN PLACE AS MATERIALS CHANGE.

Logical Requirements of an Editable Quotable Repository (in addition to Quotable Repository Publishing)

1. Change Registry Mechanisms--
   way to receive individual change notices
2. Way to play the changes backward and forward
3. Addressing scheme for changing and alternative versions
   (so we can link to, our transclude, any portion of any version in time-and-alternative space (hypertime))
4. *Way to map from addresses of bytes/elements in one version to bytes/elements in another*

Level IV. NETWORKING

POSSIBLE MULTIPLE DISTRIBUTED COPIES, INVISIBLE TO USER
(may be hidden at the client level)
(part of the standard customer contract)

Level III. EDITABLE QUOTABLE REPOSITORY

This is the next step: WHAT IT TAKES TO KEEP THE CONNECTION
POINTERS (links and transclusions) IN PLACE AS MATERIALS
CHANGE.

Logical Requirements of an Editable Quotable Repository (in addition to Quotable Repository Publishing)

1. Change Registry Mechanisms--
   way to receive individual change notices
2. Way to play the changes backward and forward
3. Addressing scheme for changing and alternative versions
   (so we can link to, our transclude, any portion of any version in time-
   and-alternative space (hyperdime))

4. Way to map from addresses of bytes/elements in one version to bytes/elements in another

Level IV. NETWORKING

POSSIBLE MULTIPLE DISTRIBUTED COPIES, INVISIBLE TO USER
(may be hidden at the client level)
(part of the standard customer contract)

samspex
d12
age 7
05.5.14

PUBLIC TABLES (grand visibilities)

These are contents which carry no royalty, though there may be service charges.
(But ftp might be okay.)

Level I Up:
For each Document--

1. **TITLE**
2. **Author & how reachable (optional)**
3. **Publisher & how reachable**
   (We must have a legal address for each publisher, but this can be kept private-- except in the case of prosecution or lawsuit)
4. **External inreaching connections to virtual document**
   links only
   (inreaching transclusions at Level I may be registered, but cannot be sold piecewise)
5. **External outreaching connections from virtual document**
   links only

Level II Up:
For each Document--

1. **CONTENT LISTING of the virtual document**
   Piece by piece
2. **External inreaching connections to virtual document**
   links
   transclusions from this document (inreaching, to take material out)
3. **External outreaching connections from virtual document**
   transclusions (implicit in content listing)
   links

For each Piece--

Owner
Address
Data Type
Royalty Rate
How Long Committed

PUBLIC TABLES (grand visibilities)

These are contents which carry no royalty, though there may be service charges.
(But ftp might be okay.)

Level I Up:
For each Document--
1. TITLE
2. Author & how reachable (optional)
3. Publisher & how reachable
(We must have a legal address for each publisher, but this can be kept
private-- except in the case of prosecution or lawsuit)
4. External inreaching connections to virtual document
links only
(inreaching transclusions at Level I may be registered, but cannot be sold
piecewise)
5. External outreaching connections from virtual document
links only

Level II Up:
For each Document--
1. CONTENT LISTING of the virtual document
Piece by piece
2. External inreaching connections to virtual document
links
transclusions from this document (inreaching, to take material out)
3. External outreaching connections from virtual document
transclusions (implicit in content listing)
links
For each Piece--
Owner
Address
Data Type
Royalty Rate
How Long Committed

Xanadu Confidential

At Level IV: For Each Provider on the Network--

SERVICE CHARGES.

delivery charges

transaction charges

(surcharge for small transactions?)

STORAGE CHARGES.

price of storage

units billed

(by the k? by the megabyte?)

special deals

(for example, Sensemedia's First Megabyte Free)

How Accounts Handled--

FOR EXAMPLE:

Require $2 deposit with first order?

Take ecash for demo runs?

PRIVATE SERVICES

details of services offered

samspex samspex samspex samspex samspex samspex samspex samspex samspex samspex samspex samspex